From: Twisdale, Jeff [jeff.twisdale@ncdenr.gov]

Sent: 3/8/2019 4:35:03 PM

To: Bloeth, Mark [Bloeth.Mark@epa.gov]

CC: Pullen, Booker [booker.pullen@ncdenr.gov]

Subject: RE: [External] RE: Permitting Capacities for ACIs

Hey Mark,

Ok thank you. I'm multitasking on other projects some this week and now back on ACIs.

- The short answer to the 35 tons/day would be no not an enforceable limit in my opinion since it's only used as classifier to determine applicability to Subpart 4E (< 35 tons/day) or 4C (> 35 tons/day). The main reason we need to determine > or < 35 tons/day for the ACIs is for the proper NSPS rule applicability. The requirements of each NSPS are basically the same. See below for an excerpt of our DAQ General TV permit subject to Subpart 4E.
- 15A NCAC 02D .0524: NSPS 40 CFR PART 60 SUBPART EEEE Standards of Performance for Other Solid Waste Incineration Units for which Construction is Commenced after December 9, 2004, or for which Modification or Reconstruction is Commenced on or after June 16, 2006
 - a. The Permittee shall comply with all applicable provisions, including the notification, testing, monitoring, recordkeeping and reporting requirements contained in Environmental Management Commission Standard 15A NCAC 02D .0524 "New Source Performance Standards (NSPS) as promulgated in 40 CFR Part 60 Subpart EEEE, including Subpart A "General Provisions."
 - i. Air curtain incinerators that burn less than 35 tons per day of municipal solid waste or air curtain incinerators located at institutional facilities burning any amount of institutional waste generated at that facility are subject to all requirements of this subpart, including the emission limitations specified in Table 1 of 40 CFR Part 60 Subpart EEEE.
 - ii. Air curtain incinerators that burn only less than 35 tons per day of the materials listed in paragraphs ii.(1) through (4) of this section collected from the general public and from residential, commercial, institutional, and industrial sources; or, air curtain incinerators located at institutional facilities that burn only the materials listed in subparagraphs (ii)(1) through (4) of this section generated at that facility, are required to meet only the requirements in 40 CFR 60.2970 through 60.2974 and are exempt from all other requirements of this subpart.
- (1) 100 percent wood waste.
- (2) 100 percent clean lumber.
- (3) 100 percent yard waste.
- (4) 100 percent mixture of only wood waste, clean lumber, and/or yard waste. [40 CFR 60.2888]
 - The ACIs we're permitting through the General TV permits will be burning only clean biomass (wood, lumber and/yard waste).

Finally, a good thought on the batch process calcs under 60.2975, but the ACIs we're permitting are only subject to 60.2970 thru .2974 not .2975. See below for rule excerpt.

- (b) Air curtain incinerators that burn only the materials listed in paragraphs (b)(1) through (4) of this section are required to meet only the requirements in §§60,2970 through 60,2974 and are exempt from all other requirements of this subpart.
- (1) 100 percent wood waste.
- (2) 100 percent clean lumber.
- (3) 100 percent yard waste.
- (4) 100 percent mixture of only wood waste, clean lumber, and/or yard waste.

Hopefully, that helps you help me answer the question about the 35 tons per day calculation (assume actuals based on batch) to determine proper NSPS rule applicability.

Thanks again,

Jeff



Jefferson (Jeff) T. Twisdale

Environmental Engineer, Division of Air Quality
North Carolina Department of Environmental Quality
1641 Mail Service Center 919.707.8472 (Office)
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jeff.twisdale@ncdenr.gov

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From: Bloeth, Mark <Bloeth.Mark@epa.gov> **Sent:** Thursday, March 07, 2019 7:56 AM **To:** Twisdale, Jeff <jeff.twisdale@ncdenr.gov>

Subject: [External] RE: Permitting Capacities for ACIs

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Hey Jeff,

I'm still working on your question and I received a little feedback which has led to a couple of follow-up questions for you:

• Is the 35 ton/day an enforceable limit described in the NCDEQ general permit language?

There is a perspective here that if so, that becomes what you use for the PTE calculation regardless of the manufacturer's specification.

(e.g., you have effectively limited their PTE with the permit condition)

Also are all of these ACIs in question only going to burn clean wood, clean lumber/yard waste?

Lastly, given the restricted hours of operation for ACIs in North Carolina does the language in the OSWI rule {40 CFR 60.2975(c)} regarding batch calculations for VSMWC (very small municipal waste combustors) help out or make things more convoluted?

60.2975 What equations must I use?

(c) Capacity of a batch very small municipal waste combustion unit.
Calculate the capacity of a batch OSWI unit as the maximum design amount of municipal solid waste it can charge per batch multiplied by the maximum number of batches it can process in 24 hours. Calculate the maximum number of batches by dividing 24 by the number of hours needed to process one batch. Retain fractional batches in the

calculation. For example, if one batch requires 16 hours, the OSWI unit can combust 24/16, or 1.5 batches, in 24 hours.

Mark Bloeth US EPA Region 4 Air Enforcement and Toxics Branch 61 Forsyth Street SW Atlanta, Georgia 30303 (404) 562-9013

From: Twisdale, Jeff <jeff.twisdale@ncdenr.gov>

Sent: Friday, March 01, 2019 1:33 PM

To: Dressler, Jason < Dressler, Jason@epa.gov>; Bloeth, Mark < Bloeth.Mark@epa.gov>

Cc: Lusky, Katy < Lusky. Kathleen@epa.gov>

Subject: RE: [External] FW: Permitting Capacities for ACIs

Thanks Jason & Mark in advance. If simpler to just respond to my email that's fine as well.

Regards,

Jeff



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From: Dressler, Jason < <u>Dressler, Jason@epa.gov</u>>

Sent: Friday, March 01, 2019 1:00 PM **To:** Bloeth, Mark < <u>Bloeth, Mark@epa.gov</u>>

Cc: Twisdale, Jeff < jeff.twisdale@ncdenr.gov>; Lusky, Katy < Lusky.Kathleen@epa.gov>

Subject: [External] FW: Permitting Capacities for ACIs

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Mark,

Can you follow up with Jeff concerning his question below?

Thanks,

Jason Dressler Acting Chief North Air Enforcement and Toxics Section US EPA Region 4 61 Forsyth Street, SW From: Twisdale, Jeff < jeff.twisdale@ncdenr.gov>

Sent: Friday, March 01, 2019 10:00 AM

To: Dressler, Jason < <u>Dressler.Jason@epa.gov</u>>

Subject: Permitting Capacities for ACIs

Hey Jason,

Can you please give me a call about the permitting capacities for ACIs in regards to 35 tons/day benchmark when most ACIs have a maximum firing rate listed say 10 tons/hour knowing that it's unrealistic to burn 10 tons/hour all day due to the batch process nature.

Thank you,

Jeff



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